

REMARKS

This amendment is responsive to the Office Action dated January 12, 2004. Applicant has amended claims 1-4 and added claims 5 and 6. Claims 1-6 are pending upon entry of this amendment.

In the Office Action, the Examiner rejected claims 1 – 4 under 35 U.S.C.103(a) as being unpatentable over Pouschine et al. (U.S. 5918232) (Pouschine) in view of Harris et al. (U.S. 5276607) (Harris) provided by Applicant.

Applicant respectfully traverses the rejection. The cited references fail to disclose each and every feature of the claimed invention, and provide no teaching that would have suggested the desirability of modification to include such features.

For example, back-solving is neither disclosed nor suggested in Pouschine. By contrast back-solving appears in the preamble of the Applicant's claims 1, 3 and 4. We have amended the claims to more clearly identify the back-solving element. Specifically, we have used the term 'back-solving' to qualify the word 'calculation' wherever it occurs in the claims 1, 2, 3 and 4. This amendment is supported in the technical disclosure, for example at paragraph [0018]: "involving both back-solving and 'forward-solving'", and at paragraph [0052]: "If a target cell is to be changed, then the back solve is performed."

Pouschine is limited to providing different views of data, and although it permits the entry of 'what-if' data, (User Entered Values - UEV) described at Col 8 lines 40-49, it does not provide constraints on values of the data, nor how the data should be used. By contrast, this aspect of the present application is clearly described at paragraph [0058] "Before any calculations and checks for parent/child relationships are undertaken the complete cube is checked for consistency. That is to say, all of the cells are checked that the rules are obeyed." We have therefore added a further dependent claim (6) to cover checking the sub cube for consistency, i.e. that all of the rules pertaining to each cell are obeyed before continuing with the method.

Further, we would point out that while the '232 Pouschine patent does relate to a similar domain of calculation engines in the milieu of Business Intelligence, '607 Harris is related only to a spreadsheet working with limited local data. It is the inventor's contention that the idea of 'remembering and recording changes' to parent cells as they occur during calculation is much

more complex than the simple expression of the idea from Harris, which relates only to a limited amount of data stored locally. We emphasize that the difference in domains is large – designers of models for use in business systems with extremely large amounts of data would not normally look to the much simpler admittedly widely known domain of spreadsheets for solutions except possibly for some guidance as to what users would like to see in a product (as opposed to any particular solution), and until the present invention, none had done so successfully. It is our contention that the subject matter of the present invention is different and distinct from Pouschine, and that the combination of Pouschine and Harris is not obvious. We therefore request reconsideration of the examiner's argument in this respect.

Regarding claim 2, the Examiner contends that all the limitations of these claims have been noted in the rejection of claim 1 above. In addition, Pouschine/Harris discloses: wherein the Parent/Child table creating Step is carried out as part of the performing one or more calculations step, so that in smaller, less complex sub-cubes, there is some advantage taken in the reduced number of times a particular cell is accessed (col. 5, lines 29-49, Pouschine).

As claim 2 depends from claim 1 and we have amended the base claim to distinguish the invention more clearly from prior art, we consider the optimization claimed in claim 2 to be both new and more obvious.

We have reviewed the prior art made of record and not relied upon, and do not find it relevant to the present application.

New Claims:

Applicant has added claims 5 and 6 to the pending application. No new matter has been added by the new claims.

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CONCLUSION


All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date:

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